

ATTACHMENT A

**UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK**

SECURITIES INVESTOR PROTECTION
CORPORATION,

Plaintiff-Applicant,

v.

BERNARD L. MADOFF INVESTMENT
SECURITIES LLC,

Defendant.

Adv. Pro. No. 08-01789 (BRL)

SIPA LIQUIDATION

(Substantively Consolidated)

In re:
BERNARD L. MADOFF,

Debtor.

**EXPERT REPORT OF
MATTHEW B. GREENBLATT, CPA/CFF, CFE
SENIOR MANAGING DIRECTOR
FTI CONSULTING, INC.**

**METHODOLOGY FOR THE
PRINCIPAL BALANCE CALCULATION**

November 15, 2012

Table of Contents

	Page
I. PROFESSIONAL BACKGROUND	1
II. SCOPE OF ASSIGNMENT	1
III. SUMMARY OF FINDINGS	3
IV. THE METHODOLOGY AND STEPS INVOLVED IN THE PRINCIPAL BALANCE CALCULATION	3
A. Overview of Methodology	3
B. Application of Methodology	5
V. THE RELEVANT DOCUMENTS/DATA MAINTAINED BY BLMIS	8
A. Customer Statements	9
B. Portfolio Management Reports	9
C. Portfolio Management Transaction Reports	10
D. Spiral Notebooks	11
E. The “Checkbook File”	11
VI. RECONCILIATION OF CASH ACTIVITY REPORTED ON BLMIS CORE ACCOUNT DOCUMENTS	12
VII. SIGNATURE AND RIGHT TO MODIFY	13
VIII. LIST OF EXHIBITS	14

I. PROFESSIONAL BACKGROUND

1. I, Matthew B. Greenblatt, am employed in the Forensic and Litigation Consulting practice of FTI Consulting, Inc. (“FTI”) as a Senior Managing Director. I have more than 18 years of experience in accounting, auditing and litigation consulting services, including forensic accounting and fraud investigations.

2. I am a Certified Public Accountant (CPA), Certified in Financial Forensics (CFF), and a Certified Fraud Examiner (CFE). I am a member of the American Institute of Certified Public Accountants, the New York State Society of Certified Public Accountants and the Association of Certified Fraud Examiners. I have spoken on multiple panels and authored articles in the area of forensic accounting and investigations, and currently serve as an adjunct professor with New York University in its forensic accounting certificate program.

3. Additional information regarding my professional experience and recent testimony is included in my Curriculum Vitae annexed hereto as **Exhibit 1**.

II. SCOPE OF ASSIGNMENT

4. Bernard L. Madoff Investment Securities LLC (“BLMIS”) was an investment firm owned and operated by Bernard L. Madoff (“Madoff”). On December 11, 2008, Madoff was arrested for violating multiple securities laws in connection with running a Ponzi scheme. On December 15, 2008, Irving H. Picard was appointed as the Trustee for the liquidation of the business of BLMIS, and Baker & Hostetler LLP was retained as his counsel. Shortly thereafter, FTI was retained by Baker & Hostetler LLP, on behalf of the Trustee, to analyze, among other things, the financial affairs of BLMIS and to assist the Trustee with the liquidation of BLMIS. As part of our engagement, FTI was tasked with the exercise of reconstructing the books and records of BLMIS, including all records of the “cash in/cash out” transactions related to the BLMIS customer accounts as far back as the records allow.

5. I, along with a team of FTI professionals working under my direct supervision, was specifically tasked with compiling chronological listings of all cash and principal transactions for every BLMIS customer account. These chronological listings consist of cash and principal transactions derived from data maintained within BLMIS’s computer systems. Such systems generated monthly customer statements (the “Customer Statements”), which were used by FTI and traced to third-party documentation where available. These chronological

listings provided the foundation to calculate every BLMIS account holder's principal balance on a daily basis for all dates during the period from April 1, 1981 through December 11, 2008 (the "Principal Balance Calculation").¹

6. Lisa M. Collura, also a Senior Managing Director with FTI, and a team of professionals working under her supervision, were specifically tasked with, among other things, determining whether cash deposit and withdrawal transactions, as reflected in the Customer Statements of BLMIS customer accounts, reconciled to available BLMIS bank records. The work performed by Ms. Collura and the FTI professionals working under her supervision is described in the Expert Report of Lisa M. Collura (the "Collura Report").

7. As a CPA, a forensic accountant and a CFE, I have the training, experience and expertise required to work with and supervise members of the FTI team of professionals to accomplish the reconstruction of the books and records of BLMIS. I have prepared this report with the assistance of other FTI professionals working under my direct supervision.

8. If called upon to testify in this matter, I intend to provide testimony regarding my analyses and conclusions consistent with this report. FTI is being compensated at a rate of \$554 per hour for my professional time incurred in performing the work necessary to prepare this report. FTI's fees are not contingent on the conclusions reached in this report or the outcome of the subject litigation.

9. The documents and data that I considered in connection with this report are listed in **Exhibit 2**. I reserve the right to supplement my report based on any additional documents or information received.

¹ The first monthly Customer Statement which reported dollar amounts for any securities allegedly held at month end was March of 1981. Therefore, the full period in which the Principal Balance Calculation could be performed covered the time period from April 1, 1981 through December 11, 2008.

III. SUMMARY OF FINDINGS

10. All cash and principal deposits and withdrawals made by BLMIS customers that were recorded on the Customer Statements were accumulated by FTI to prepare chronological listings of those transactions. These chronological listings were used to perform the Principal Balance Calculation for every individual BLMIS customer account on a daily basis from April 1, 1981 through December 11, 2008.

11. Third-party supporting documentation, in the form of bank statements and cancelled checks, was available for the full ten-year period prior to the collapse of BLMIS as detailed in the Collura Report. There were three bank accounts which were used by BLMIS for customer deposits and withdrawals during at least the ten-year period from December 1998 to December 2008. These three accounts were: (a) JPMorgan Chase account #xxxxx1703; (b) JPMorgan Chase account #xxxxxxxxxx1509; and (c) Bankers Trust account #xx-xx0-599.² These third-party bank records confirm that the customers' cash deposits and withdrawals recorded on the Customer Statements were accurately recorded.

12. Because the cash deposits and withdrawals made by BLMIS's customers and recorded on the Customer Statements have been reconciled to third-party bank records where available, as set forth in the Collura Report, it is my opinion that the cash and principal transactions reported on the Customer Statements are fairly and accurately represented.

IV. THE METHODOLOGY AND STEPS INVOLVED IN THE PRINCIPAL BALANCE CALCULATION

A. Overview of Methodology

13. Each BLMIS customer account's Principal Balance Calculation is derived by providing credits for the amount of principal deposited into that customer's BLMIS account and by deducting amounts of principal withdrawn.

14. Using Customer Statements and other BLMIS documents, FTI reconstructed the cash and principal activity on an account-by-account basis from April 1, 1981 through December

² Personal Identifying Information has been redacted throughout this Report and its accompanying Exhibits in compliance with Fed. R. Bankr. P. 9037 and applicable federal and state law.

11, 2008.³ During this period, FTI verified the cash and principal transactions on the Customer Statements using available third-party bank records.

15. From the chronological listings of cash and principal activity on an account-by-account basis, FTI performed the Principal Balance Calculation for each BLMIS customer account on a daily basis from April 1, 1981 through December 11, 2008.

16. The majority of the principal transactions in the chronological listings prepared for each BLMIS customer account consists of cash deposits and cash withdrawals. However, to the extent that additional transactions occurred, those transactions have been factored into the Principal Balance Calculation for each customer.

17. The steps of the Principal Balance Calculation for each BLMIS customer account are set forth below and are discussed more fully in the subsequent sections of this report:

INFLOWS:

- The reported amount on an account holder's Customer Statement as of April 1, 1981 for those accounts that were opened prior to April 1, 1981⁴
- Cash deposits
- Non-cash deposits⁵
- Inter-account transfers of principal into one BLMIS customer account from another BLMIS customer account⁶

OUTFLOWS

- Cash withdrawals
- Inter-account transfers of principal out of one BLMIS customer account into another BLMIS customer account
- Payments made by BLMIS on behalf of customers⁷

³ The cash and principal transactions that have been identified and obtained from Customer Statements and other documents available within BLMIS's records have been accumulated and loaded into a Microsoft SQL Server database.

⁴ Accounts that were opened at BLMIS before April 1, 1981 were granted initial principal credit equal to the cash balance reported plus the cost basis of positions reported as held on March 31, 1981 on the Customer Statements.

⁵ The non-cash deposits represent those instances in which a limited number of BLMIS customers made deposits of actual bonds and/or securities that were credited to their BLMIS accounts, as well as any reported subsequent earnings on such deposited bonds and/or securities as they were reflected on corresponding Customer Statements.

⁶ Only the portion of the inter-account transfers between BLMIS accounts for which the transferor had actual principal can be transferred. As such, all inter-account transfers have been analyzed and allowed only up to the amount of principal available in the transferor's account on the day of the transfer.

18. The Principal Balance Calculation does not include trading activity reflected on Customer Statements. At the direction of the Trustee's counsel, no credit is given (or removed) for gains (or losses) resulting from trades reflected on Customer Statements. Similarly, at the direction of the Trustee's counsel, no credit is given (or removed) for the portion of inter-account transfers that were for amounts in excess of the principal in individual customer accounts at the time of those transfers.

19. Described below are the seven steps involved in the Principal Balance Calculation for each BLMIS customer account.

B. Application of Methodology

Step #1 – Principal Credit as of April 1, 1981

20. The first step of the Principal Balance Calculation is to ascertain the initial investment made by each customer. This initial investment is most often a cash deposit or inter-account transfer (both described in detail below).

21. In a small number of instances, certain accounts were opened prior to April 1981, and for those accounts, sufficient information is not available to determine the date and amount of the initial investment. The earliest date for which the BLMIS records permit FTI to initiate the Principal Balance Calculation is the ending balance on the March 31, 1981 Customer Statements.

22. The Principal Balance Calculation for BLMIS accounts opened prior to April 1, 1981, provides a credit for principal equal to both the account's ending cash balance reported and the historical cost of the securities reported as held in the account as of March 31, 1981 on the Customer Statements.⁸

⁷ BLMIS withheld certain amounts from foreign account holders payable to the Internal Revenue Service ("IRS") and BLMIS subsequently made these corresponding payments to the IRS on behalf of these customers.

⁸ The Customer Statements reported amounts related to securities allegedly held at historical cost values, as opposed to market values, and therefore the historical cost basis was used in the limited instances in which BLMIS accounts pre-dated April 1, 1981. In total, there were only 388 BLMIS accounts open as of April 1, 1981. The Principal Balance Calculation for those accounts grants a principal credit in the amount of \$164,023,721.

Step #2 – Cash Deposits

23. The next step of the Principal Balance Calculation is the identification of the cash deposits that were made by each account holder in the form of checks or wire transfers, and which were recorded on Customer Statements.

24. These cash deposits made by BLMIS account holders were supported by third-party bank records, which were available for the ten-year period prior to the collapse of BLMIS.

Step #3 – Non-Cash Deposits of Principal

25. In addition to the cash deposits from customers via check and wire transfer, there were also limited instances of non-cash deposits (e.g., securities and bonds) that were made by individual BLMIS customers over the years.

26. These transactions represent deposits of principal and FTI included these amounts (as well as the subsequent earnings reported on corresponding Customer Statements) in the Principal Balance Calculation.

Step #4 – Inter-account Transfers of Principal *Into* One BLMIS Customer Account from Another BLMIS Customer Account

27. An inter-account transfer is defined as a transaction between BLMIS customer accounts in which no new funds entered or left BLMIS, but rather a book entry occurred at BLMIS to internally adjust the balances of those accounts.

28. The amount of the inter-account transfers that affects the Principal Balance Calculation is based on the amount of principal available in the transferor's account at the time of transfer. Inter-account transfers from one BLMIS account to another BLMIS account consisted of: (a) all principal; (b) all fictitious profits; or (c) a combination of principal and fictitious profits. For example, if sufficient principal existed in the transferor's account to cover the amount of the transfer in question, FTI treated the full amount as "withdrawn" from the transferor's account and "deposited" into the transferee's account for purposes of performing the Principal Balance Calculation. However, where there was either insufficient principal to cover the full amount of the transfer, or no principal at all at the time of the transfer, the portion of the transfer in excess of the principal in the transferor's account was considered to be fictitious

profits. As a result, when computing the Principal Balance Calculation, no credit was given for a corresponding deposit of these fictitious profits into the transferee's account.⁹

Step #5 – Cash Withdrawals

29. Another step of the Principal Balance Calculation is to identify the cash withdrawals (or redemptions) that were made by each BLMIS account holder.

30. Included as a reduction in the Principal Balance Calculation are those amounts of cash withdrawals, in the form of checks or wire transfers, where BLMIS made payments to account holders (or their designees) and those amounts were shown on Customer Statements.¹⁰

31. Similar to the cash deposits made by BLMIS account holders, the cash withdrawals (or redemptions) that were made by each account holder were corroborated by third-party bank records (bank statements and cancelled checks), which were available for the ten-year period prior to the collapse of BLMIS.

Step #6 – Inter-account Transfers of Principal *Out* of One BLMIS Customer Account Into Another BLMIS Customer Account

32. Consistent with the inter-account transfers of principal *into* one BLMIS customer account, the inter-account transfers *out* to another BLMIS account represent those reported transactions between BLMIS customer accounts in which no new funds entered or left BLMIS, but rather a book entry occurred at BLMIS to internally adjust the balances of those accounts.

33. For the inter-account transfers out to another BLMIS account, the amount that affects the Principal Balance Calculation is limited to the amount of principal available in the transferor's account at the time of transfer.

34. When performing the Principal Balance Calculation, the order in which the transactions are processed matters for those transactions occurring on the same day. In these instances, cash withdrawals are calculated first, followed by cash additions and then inter-account transfers. This order allows the account holders to withdraw any remaining principal in the form of a cash redemption prior to the internal transfer to another BLMIS customer account.

⁹ Prior to 1993, Madoff commingled the funds of a limited number of customers into pooled accounts. FTI performed further investigation and analysis to calculate the principal attributable to each account on a customer-by-customer basis consistent with the Trustee's counsel's determination.

¹⁰ The information on Customer Statements and BLMIS records regarding payments to account holders provides the "issue date" of the check or wire; however, the funds change hands on the clearing date, which is subsequent to the date of issuance for check payments. At the direction of the Trustee's counsel, the Principal Balance Calculation uses the clearing date for checks which were issued before certain cut-off dates (90-day, one-year, two-year and six-year) before December 11, 2008, but cleared during those time periods.

Step #7 – Payments Made by BLMIS on Behalf of the Account Holder

35. FTI has identified instances in which amounts were withheld from customer accounts by BLMIS and payments of those amounts were subsequently made to a third-party on behalf of the account holder. BLMIS withheld funds from foreign account holders throughout the year, showed the amounts withheld as reductions to the purported equity in these customers' accounts, and then made subsequent monthly payments to the IRS in the aggregate amount for all amounts withheld.

36. These withheld amounts have been included as reductions to the Principal Balance Calculation because the cash payment was made for the benefit of the account holder.¹¹

V. THE RELEVANT DOCUMENTS/DATA MAINTAINED BY BLMIS

37. In addition to the Customer Statements, other relevant documents existed within BLMIS's corporate books and records that were used, when necessary, to perform the Principal Balance Calculation for each BLMIS customer account (the "Core Account Documents").

38. The Core Account Documents include, but are not limited to, Customer Statements, cash receipts records, cash disbursements records, internal reports generated by, and maintained within, BLMIS's hard copy records and computer systems (including an IBM AS/400 and predecessor systems).

39. The following section provides a description of each of the available Core Account Documents, as well as the level of priority placed on such information for purposes of preparing the chronological listings of all cash and principal transactions for every BLMIS customer account.

¹¹ The IRS refunded amounts which BLMIS withheld and paid to the IRS on behalf of certain customers during the six-year period prior to the filing date. As a result of the refund to the Trustee, for purposes of the performing the Principal Balance Calculation, those refunded amounts were credited back to the particular customers for whom they had been withheld. *See Settlement Agreement by and between the Trustee and the United States on behalf of the IRS, In re Bernard L. Madoff Inv. Sec. LLC, No. 08-1789 (Bankr. S.D.N.Y. Nov. 22, 2011) (PUBLIC0591623-PUBLIC0591643).*

A. Customer Statements

40. The Customer Statements represent the primary document type for the preparation of the chronological listings of the cash and principal transactions used to perform the Principal Balance Calculation. Highest priority is accorded to the monthly Customer Statements because: (i) the cash and principal transactions recorded on the Customer Statements are supported by third-party bank records for all periods for which such records are available;¹² (ii) they provide the most comprehensive source of account history as they contain line item-by-line item cash and principal transactions; and (iii) they were printed and provided to customers.

41. The Customer Statements were generated by BLMIS's computer systems (including the AS/400 system and its predecessor systems) on a monthly basis. To date, FTI has identified monthly Customer Statements for all customer accounts for the period from April 1, 1981 through November 30, 2008, with only very minor exceptions in certain months for which individual Customer Statements are unavailable.

42. Within BLMIS's books and records, there are two different comprehensive sources of Customer Statements: (i) electronically stored Customer Statements maintained at BLMIS on a storage device, referred to as StorQM; and (ii) images of Customer Statements stored on reels of microfilm. These records have been identified for the following time periods:

- The Customer Statements maintained within the StorQM server cover the time period from December 1995 through November 2008.
- The Customer Statements obtained from microfilm reels cover the time period from November 1978 through November 1995.

43. **Exhibits 3 and 4** set forth representative examples of Customer Statements stored electronically on the StorQM server and on microfilm, respectively.

B. Portfolio Management Reports

44. The Portfolio Management Reports ("PMRs") are another type of internal report maintained by BLMIS, which FTI used to perform the Principal Balance Calculation. The PMRs were generated by BLMIS on a monthly basis and provided calendar year-to-date information on a summary level about principal additions to, and withdrawals from, BLMIS customer accounts.

¹² See Collura Report.

45. FTI has identified PMRs for all customer accounts from January 1982 through November 2008, with only minor exceptions for certain months (prior to December 1995) in which individual PMRs are unavailable from the microfilm records. These reports have been used as a source of reconciliation for the Customer Statements identified and described above.

46. In certain instances where a Customer Statement was not available, the applicable PMR was used to supplement the missing cash transactions. In these instances, the PMR data was added to the chronological listings of cash and principal transactions used to perform the Principal Balance Calculation.

47. For example, assume BLMIS records for hypothetical account #123 during 1994 contain all but the March 1994 monthly Customer Statement. The eleven available monthly Customer Statements during 1994 demonstrate total aggregate cash deposits of \$100,000; however, the PMR for the year ended December 31, 1994 shows a value of \$120,000 of “capital additions.” In such an example, FTI would make an adjustment to the chronological listing for the customer to add an incremental deposit of \$20,000, credited as of March 31, 1994, in order to support the activity on the missing month’s Customer Statement. (See **Exhibit 5** for an example of a PMR used by FTI as a reconciling source to the Customer Statement and/or as a supplement to account transaction histories in the absence of Customer Statements.)

C. Portfolio Management Transaction Reports

48. The Portfolio Management Transaction Reports (“PMT Reports”) are another type of internal report maintained by BLMIS that provide transaction-level detail related to each customer account on a monthly basis. The additional benefit these reports offer that the PMRs do not provide is that the PMT Reports show dates on which specific transactions occurred within a particular month. These reports are available for the time periods from January 1985 through December 1986 and from January 1990 through December 1995.

49. The PMT Reports were used in conjunction with the PMRs as a reconciling source to Customer Statement transactions. In addition, similar to the PMRs, the PMT Reports were utilized to supplement the chronological listings of cash and principal transactions used to perform the Principal Balance Calculation in the absence of a particular Customer Statement. (See **Exhibit 6** for an example of a PMT Report.)

D. Spiral Notebooks

50. FTI has identified certain handwritten stenographic (spiral-bound) notebooks in BLMIS's records. These notebooks, which were arranged as "Check In" and "Check Out" notebooks, contain transaction information related almost exclusively to check receipts and check disbursements. Each line item and/or group of transactions identified in these notebooks corresponds with a customer account number and/or a customer name.

51. These handwritten records cover the time periods from April 1985 through September 1990 and August 1991 through November 1994. While not an all-inclusive listing of every cash transaction, these spiral notebooks provide information about cash deposits and withdrawals which FTI used for reconciliation to the Customer Statements. In limited situations in which Customer Statements, PMRs and PMT Reports were not available from the microfilm records, the cash deposit and cash withdrawal line items from these notebooks were used in the Principal Balance Calculation. (See **Exhibit 7** for an excerpt from the spiral notebooks.)

E. The "Checkbook File"

52. A data table within BLMIS's AS/400 computer system (the "Checkbook File") was maintained from January 2000 through December 11, 2008 and contains account-by-account cash receipts and cash disbursements on a daily basis.

53. The Checkbook File contains transaction-level detail input manually by BLMIS employees, including, but not limited to, the date, the amount and the account number for each cash deposit and withdrawal made by BLMIS customers. FTI used this data for the reconciliation of Customer Statements.

54. The Checkbook File was the only BLMIS record available to identify the cash and principal transactions for the time period from December 1, 2008 through December 11, 2008 (following the issuance of the last monthly Customer Statement prepared and distributed by BLMIS to its customers for the period ending November 30, 2008). The cash deposit and withdrawal transactions reflected in the Checkbook File were reconciled to third-party bank records, as set forth more fully in the Collura Report. This data was used by FTI to perform the Principal Balance Calculation. (See **Exhibit 8** for an excerpt from the Checkbook File maintained within BLMIS's AS/400 system.)

VI. RECONCILIATION OF CASH ACTIVITY REPORTED ON BLMIS CORE ACCOUNT DOCUMENTS

55. FTI completed the task of compiling the chronological listings of all cash and principal transactions for every BLMIS customer account to perform the Principal Balance Calculation.

56. As set forth more fully in the Collura Report, FTI reconciled approximately 99% of the total number of cash transactions recorded on Customer Statements from December 1998 through December 2008.¹³ It should be noted that the remaining 1% of these transactions does not represent transactions that are contradicted by the third-party records, but rather represent cash transactions reported on Customer Statements for which no third-party bank record is available (e.g., where no cancelled check exists).

¹³ There were a total of approximately 225,000 cash transactions between December 1, 1998 and December 11, 2008. This represents approximately 51% of the total cash transactions for the full period of the Principal Balance Calculation between April 1, 1981 and December 11, 2008. While third-party bank records are unavailable to reconcile the cash transactions prior to December 1, 1998, based upon the reconciliation of approximately 99% of the total number of cash transactions recorded on Customer Statements from December 1998 through December 2008, I can reasonably infer that the cash transactions on Customer Statements prior to December 1998 would reconcile to third-party bank records had such records been available.

VII. SIGNATURE AND RIGHT TO MODIFY

57. This report and the exhibits contained herein present my findings and the bases thereof. To the extent that any additional information is produced by any party, I reserve the right to incorporate such additional information into my report or to modify my report as necessary.

Respectfully submitted,



Matthew B. Greenblatt, CPA/CFF, CFE
Senior Managing Director
FTI Consulting, Inc.

Dated: November 15, 2012

VIII. LIST OF EXHIBITS

Exhibit 1 – Curriculum Vitae and Testimony of Matthew B. Greenblatt

Exhibit 2 – Documents Considered

Exhibit 3 – Example of Customer Statement from StorQM

Exhibit 4 – Example of Customer Statement from Microfilm

Exhibit 5 – Example of a Portfolio Management Report (PMR) From Microfilm

Exhibit 6 – Example of a Portfolio Management Transaction Report (PMT Report) From Microfilm

Exhibit 7 – Excerpt from the Spiral Notebooks

Exhibit 8 – Excerpt from the Checkbook File